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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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|-----------------|-------------|----------------------|---------------------|------------------|

09/277,298

03/26/1999

GEORGE E. CARTER

99P7519US

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01/27/2005

SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
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EXAMINER

ARANI, TAGHI T

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/277,298

Applicant(s)

CARTER, GEORGE E.

Examiner

Taghi T. Arani

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13, 14 and 16-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13, 14 and 16-31 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8-11 and 32-35 is/are rejected.
- 7) ☒ Claim(s) 4 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claims 1-11, 13-14, 16-35 are pending in the Application.

In view of Applicant's arguments filed 10/15/ 2004, the examiner presents a new ground (s) of rejection in this office action .Therefore, response to applicant's arguments is moot.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

32, 33, 34, 35, 2 and 9
Claims 1, 8 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by

6A
1/2/05
Faucher et al., US patent 5, 455, 861.

As per claims 1 and 8 and 11, Faucher et al. teach a method /computer readable medium containing program instructions and an operating system for configuring a first computer so that a first telephony client on the first computer may securely communicate with a second telephony client on a second computer via a communication path , the computer readable medium comprising (col. 1, lines 35-49):

computer code for inserting a security algorithm (Figure 18, STDs 1810 and 1865) within the communication path between the first telephony client (Figure 18, Telephone base 1815) and a sound device (Figure 18, handsets) on the first computer, the security algorithm performing cryptographic operations on audio data transmitted in

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at least one direction between the first telephony client and the sound device (col. 1, line 65 through col. 2, line 43) .

As per claims 32 and 34, Faucher et al. teach a computer-readable medium/method recited in claims 1 and 8 respectively, wherein the security algorithm audio data received from the sound device and transmits encrypted audio data to the first telephony client (col. 2, lines 1-15).

As per claims claim 33 and 35, Faucher et al. teach a computer-readable medium/ and a method as recited in claims 1 and 8, wherein the security algorithm decrypts audio data received from the first telephony client and transmits decrypted audio data to the sound device (col. 2, lines col. 2, lines 16-28).

As per claims 2 and 9, Faucher et al. teach a computer-readable medium/ and a method as recited in claims 1 and 8, wherein the security algorithm operates independently of the first telephony client and the second telephony client (col. 10, lines 16-24).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faucher et al. as applied to claims 1 and 8 above and further in view of prior art of record, Kavsan (US Pat. No. 412,069).

Faucher et al. fails to teach wherein the security algorithm is inserted within the first computer's operating system kernel;

wherein the security algorithm is not implemented within a user mode of the first computer system.

However, Kavsan is directed to a cryptographic service software which is compatible and communicates with a standard operating system computer. Kavsan's cryptographic service software is situated in kernel space of the operating system (recited in claims 3, 6 and 10, i.e. it is not implemented within a user mode of the first computer's operating system), see col. 2, lines 50-67.

Kavsan further teaches that the cryptographic service software is capable of encrypting hard drive data and IP packet at the driver level of the personal computer. Kavsan's cryptographic service software allows to encrypt signals at the driver level, such as at the Ethernet port or at the modem port, video card or disk drive, etc., see col. 3, lines 17-29.

Kavsan discloses that the cryptographic service software at application space and the kernel space communicate through corresponding interfaces for encrypting and decrypting signals, see col. 3, lines 30-52. The teaching of Kavsan clearly suggests encrypting audio data received from the sound device (at the driver level) and providing the encrypted data to the cryptographic software situated at the application space and

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decrypting signals received from the application space at the kernel space (recited in claims 32-35).

That is, the Kavsan's cryptographic service software is independent of higher-level application programs (recited in claims 2 and 9).

It would have been obvious to one ordinary skill in the art to modify Solomon's invention to employ cryptographic service software of Kavsan Faucher et al's method of voice packets in telephony application to provide encryption /decryption to telephony clients to conduct encrypted communication at the driver level of the client computer, because application level cryptographic services such as CryptoAPI would not work at the driver level where IP packets need to be encrypted, Kavsan, col. 1, lines 47-61.

As per claims 5, Kavsan teaches that the cryptographic service module at the kernel space includes a library of encryption algorithms and the like, see col. 3, lines 39-52. Kavsan is silent on selecting an algorithm from a group consisting of an IDEA, a DES, a GOST, an RC5, and a SEAL algorithm.

The examiner asserts that DES, DEA, GOST, RC5 and SEAL algorithms are industry standard block cipher algorithms used in various applications where a balance on processing speed and the security level is required.

Allowable Subject Matter

Claims 4 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 13-14, 16-31 are allowed over prior art of record as stated in the statement of reasons for allowance in the previous office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taghi T. Arani whose telephone number is (571) 272-3787. The examiner can normally be reached on 8:00-5:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Taghi T. Arani, Ph.D.
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Art Unit 2131



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